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| 10/001,361 | 10/23/2001 | David Holbrook | | 1364 |

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Terence Sean Sullivan
PO Box 425475
Cambridge, MA 02142

EXAMINER

DIVECHA, KAMAL B

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| ART UNIT | PAPER NUMBER |
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2151

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/001,361

Applicant(s)

HOLBROOK ET AL.

Examiner

KAMAL B. DIVECHA

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2001.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The IDS filed on 10/23/2001 has been considered.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, all the features disclosed in claims 1, 21 and 22 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: the references cited on page 3-4 of the disclosure. Applicant is requested to remove the references cited on page 3-4 and cite them in the information disclosure statement.

Appropriate correction is required.

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 3 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Regarding claim 1, the phrase "may subsequently request" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).
- Regarding claim 3, applicant fails to define and provide the useful meaning and definition of "multilevel network architecture" in the claim.
- Regarding claim 12, the phrase "may be configured" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-3, 14-16, 18 and 22 are rejected under 35 U.S.C. 103(a) as being obvious over Vaudreuil (U. S. Patent No. 5,740,230) in view of Modiri et al. (U. S. Patent No. 6,192,401 B1).

As per claim 1, Vaudreuil discloses a method for the delivery of an incoming message in a messaging system comprising a central server of said messaging system, a plurality of messaging nodes (fig. 1), a plurality of user accounts with distinct message address identifiers (col. 21 L40-65; fig. 10 item #149 and col. 4 L49-53), and a communications means for establishing a first communications link between each of said messaging nodes and said central server (col. 11 L1-27 and fig. 1; col. 12 L14-26); said method comprising the steps of: maintaining an association table, associating user accounts with at least one messaging node (fig.

10 item #149 and col. 21 L40-65 and fig. 14); identifying at least one user account indicated as a recipient of said incoming message, determined from a header of said incoming message (col. 22 L42-67); transmitting said incoming message across said first communications link to said messaging node (col. 2 L13-20; col. 11 L52-55; col. 12 L33-36); and buffering said incoming message at said messaging node, prior to a user request to collect new messages from said messaging system, where by said incoming message is buffered at messaging nodes from which recipients **may** subsequently request the collection of said incoming message (fig. 10 item #146 and col. 9 L56-65 and col. 12 L50-55), however, Vaudreuil does not explicitly disclose the method including the step of determining membership of a messaging node within a primary messaging node (read as cluster), corresponding to a subset of said messaging nodes associated in said association table with said recipient user account.

Modiri discloses a method to determine the membership of node in the cluster (see abstract, col. 2 L40-42). Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Modiri as stated above with the method and system of Vaudreuil in order to determine membership of a messaging node within a primary messaging zone.

One of ordinary skilled in the art would have been motivated because it would have advantageously increase availability and performance by favoring the most valued (fastest, etc) nodes in the cluster (Modiri, col. 2 L35-40). Additionally, one of ordinary skilled in the art would have been motivated so that the messages are routed to the correct destination and placed in an intended users mailbox for later retrieval at the convenience of the user.

As per claim 2, Vaudreuil teaches the communication process, wherein communication link, with at least one messaging node, is intermittent (col. 12 L33-55).

As per claim 3, Vaudreuil discloses communication systems including multilevel network architecture between said central server and said messaging node (fig. 1).

As per claim 14, Vaudreuil discloses messaging nodes located at a plurality of publicly accessible locations across a geographic region (fig. 1).

As per claim 15, Vaudreuil discloses the method wherein association table associates at least one of user accounts with a plurality of said messaging nodes (Fig. 10 item #149, fig. 2 and fig. 1 item #12, 14, 16 and col. 21 L40-65).

As per claim 16, Vaudreuil discloses the method comprising using a dial-up modem connection (col. 12 L44-55).

As per claim 18, Vaudreuil discloses the communication link, with at least one messaging node, is unreliable (col. 12 L44-55).

As per claim 22, it does not teach or further define over the limitations in claim 1-3, 14-16 and 18. Therefore, claim 22 is rejected for the same reasons as set forth in claims 1-3, 14, 16 and 18.

8. Claims 13 and 17 are rejected under 35 U.S.C. 103(a) as being obvious over Vaudreuil (U. S. Patent No. 5,740,230) in view of Modiri et al. (U. S. Patent No. 6,192,401 B1), and further in view of "Official Notice".

As per claim 13, Vaudreuil in view of Modiri does not explicitly teach the method wherein buffered message is retained in storage at said message node until at least one of the

following conditions are met: said buffered message node has been collected from messaging node; said buffered message node has been collected from another messaging node; said buffered message node has been uncollected for longer than a predetermined interval; or said messaging node buffer storage utilization exceeds predetermined limits. But, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to retain the messages in a storage at messaging node until at least one of the conditions set forth above are met or occur. One of ordinary skilled in the art would have been motivated because it would have created storage space for incoming messages and would have further improved the buffering efficiency and/or storage efficiency.

As per claim 17, Vaudreuil teaches store and forward networking mechanism (col. 1L22-23), however, Vaudreuil does not explicitly disclose first communication link as a store and forward satellite communications system. But it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Vaudreuil to include store-and-forward satellite communication system. One of ordinary skilled in the art would have been motivated because this system would have enabled transmission of messages across great distances between two terminals on the ground.

9. Claims 4, 11 and 19-20 are rejected under 35 U.S.C. 103(a) as being obvious over Vaudreuil (U. S. Patent No. 5,740,230) in view of Modiri et al. (U. S. Patent No. 6,192,401 B1), and further in view of Rothblatt (U. S. Patent No. 6,105,060).

As per claim 4, Vaudreuil in view of Modiri discloses a communication systems further comprising plurality of messaging units (Vaudreuil, fig. 1), however, Vaudreuil in view of

Modiri, does not explicitly disclose communication system further comprising a plurality of portable messaging units, where each of said portable messaging units: includes communication means for establishing a temporary second communications link with any of at least a subset of said messaging nodes; conducts a data exchange with at least one of said messaging nodes, and includes user interface means for the display of incoming message.

Rothblatt, from the same field of endeavor, explicitly discloses portable messaging units (fig. 1 item #21 and item #29; col. 2 L45-48), where each of portable messaging unit: includes communication means for establishing a temporary second communications link with any of at least a subset of said messaging nodes (fig. 5 item #85); conducts a data exchange with at least one of said messaging nodes (col. 2 L46-64), and includes user interface means for the display of incoming message (fig. 5 item #111 and item #120). Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Rothblatt as stated above and replace the messaging units of Vaudreuil in view of Modiri with the portable messaging units of Rothblatt.

One of ordinary skilled in the art would have been motivated because it would have provided portable or mobile communication services to portable users (Rothblatt, col. 1 L33-67).

As per claim 11, Vaudreuil teaches the method wherein data exchange is encrypted (col. 28 L61-67 to col. 29 L1-7).

As per claim 19, Rothblatt discloses the method where the user terminal enters the responses and requests (read as request for advanced network function) to the Internet service provider via the communication link and receives multimedia data from the satellite (read as an automated response, col. 2 L45-64). Therefore, it would have been obvious to a person of

Art Unit: 2151

ordinary skilled in the art at the time the invention was made to combine Rothblatt and Vaudreuil in view of Modiri in order to receive an automated response for a request for advanced network function. One of ordinary skilled in the art would have been motivated because this would have provided the user terminals, the multimedia data and/or information and messages (Rothblatt, col. 2 L59-63).

As per claim 20, Rothblatt discloses the method wherein said advanced network functions comprise network webpage retrieval (col. 2 L16-21). Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Rothblatt as stated above with Vaudreuil in view of Modiri in order to include a network function that retrieves a webpage. One of ordinary skilled in the art would have been motivated because of the same reasons as set forth in claim 19.

10. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being obvious over Vaudreuil (U. S. Patent No. 5,740,230) in view of Modiri et al. (U. S. Patent No. 6,192,401 B1), and further in view of Rothblatt (U. S. Patent No. 6,105,060), and further in view "Official Notice".

As per claim 5, neither of the references above teaches the method wherein data exchange is conducted via a photonic communication system, but it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to conduct the data exchange via a photonic communications system. One of ordinary skilled in the art would have been motivated because Photonics networks offer dramatic increases in speed and bandwidth, allowing significantly greater amounts of information to be encoded and transmitted than with traditional cabling solutions.

As per claim 6, neither of the references above teaches the method wherein data exchange is conducted via a supersonic communications system, but it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to conduct the data exchange via a supersonic communications system. One of ordinary skilled in the art would have been motivated because it offers high speed and data rates.

As per claim 7, neither of the references above teaches the method wherein data exchange is conducted via a low power radio frequency transceiver communications system with a communications range under 100 meters, But it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to conduct a data exchange via a low power RF transceiver with communications range under 100 meters because the operational standards of the low power RF transceiver are more relaxed and as a result, the production costs of RF frequency communication systems using low power transceivers are well below those of comparable systems using the high power transceivers for maintaining their communications links. It is also known that whenever data system components which are linked by RF transceivers are to be used in an environment wherein only short distances are expected to separate the linked components, the low power data transmission devices would appear to be advantageous with respect to the high power data transmission devices.

As per claim 8, neither of the references explicitly teaches the process of conducting data exchange via a temporary data cable, but it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to conduct the data exchange through a data cable because portable computers such as a portable laptops are capable of conducting data exchange using the LAN cable. One of ordinary skilled in the art would have been motivated

Art Unit: 2151

because it would have provided a communications means between the two computer systems whenever other communications means such as wireless communications means fails.

11. Claim 9 is rejected under 35 U.S.C. 103(a) as being obvious over Vaudreuil (U. S. Patent No. 5,740,230) in view of Modiri et al. (U. S. Patent No. 6,192,401 B1), and further in view of Rothblatt (U. S. Patent No. 6,105,060), and further in view Miller et al. (U. S. Patent No. 5,195,183).

As per claim 9, neither of the references above discloses the method wherein messaging nodes include docking ports for communication with said portable messaging units. Miller explicitly discloses a data communication system with communicating docking apparatus for portable data terminals (fig. 6, col. 3 L34-37). Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Miller with Vaudreuil, Modiri and Rothblatt in order to include docking ports for communication with portable messaging units. One of ordinary skilled in the art would have motivated because it would have enabled communication between plurality of portable terminals and the host messaging node (Miller, col. 3 L34-37).

12. Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being obvious over Vaudreuil (U. S. Patent No. 5,740,230) in view of Modiri et al. (U. S. Patent No. 6,192,401 B1), and further in view of Rothblatt (U. S. Patent No. 6,105,060), and further in view Danielson et al. (U. S. Patent No. 6,049,813).

As per claim 10, Neither Vaudreuil, nor Modiri, nor Rothblatt disclose the method wherein data exchange is initiated upon the placement of one of said portable messaging units in a docking port associated with said messaging node.

Danielson discloses a portable data collection terminal where data exchange is initiated upon the placement of portable unit in a docking device associated with the host (col. 26 L47-51 and fig. 30). Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Danielson as stated above with Vaudreuil, Modiri and Rothblatt in order to conduct data exchange.

One of ordinary skilled in the art would have been motivated because it would have enabled communication with external devices such as messaging nodes or a host computer (Danielson, col. 26 L47-51).

As per claim 12, Danielson discloses a portable terminal capable of conducting data exchanges on behalf of plurality of user accounts (fig. 29). Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Danielson with Vaudreuil, Modiri and Rothblatt in order to conduct data exchange in order to conduct data exchange on behalf of plurality of user accounts. One of ordinary skilled in the art would have been motivated because of the same reasons as set forth in claim 10.

13. Claim 21 is rejected under 35 U.S.C. 103(a) as being obvious over Leonard et al. (U. S. Patent No. 6,721,784 B1) in view of Vaudreuil (U. S. Patent No. 5,740,230).

As per claim 21, Leonard discloses a method for the delivery of an incoming message in a messaging system comprising a central server of messaging system (fig. 16 item #10 and fig. 17), a plurality of messaging nodes (fig. 16 item #13, 3 and fig. 17), and a communication means for establishing a first communication link between each of said messaging nodes and said central server (fig. 17), said method comprising steps of identifying at least one user account indicated as a recipient of said incoming message, determined from a header of said incoming message (col. 16 L8-11); identifying a primary messaging zone (read as identifying a group of recipients, col. 23 L19-30 and fig. 17); and transmitting said incoming message across said first communications link to members of said primary messaging zone (col. 23 L5-13, col. 16 L27-37, col. 22 L29-32 and fig. 170), however, Leonard does not explicitly disclose said method comprising the steps of maintaining an association table, associating user accounts with at least one messaging node; and buffering said incoming message at said messaging nodes, prior to a user request to collect new messages from said messaging system, where by said incoming message is buffered at messaging nodes from which recipients may subsequently request the collection of said incoming message.

Vaudreuil, from the same field of endeavor, discloses a method for the delivery of an incoming message in a messaging system (fig. 17) comprising the steps of: maintaining an association table, associating user accounts with at least one messaging node (fig. 10 item #149 and col. 21 L40-65 and fig. 14); and buffering said incoming message at said messaging node, prior to a user request to collect new messages from said messaging system, where by said incoming message is buffered at messaging nodes from which recipients may subsequently request the collection of said incoming message (fig. 10 item #146 and col. 9 L56-65 and col. 12

Art Unit: 2151

L50-55). Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Vaudreuil as stated above with Leonard in order to maintain user accounts with at least one messaging node and buffer incoming message at messaging node.

One of ordinary skilled in the art would have been motivated because it would have routed and filtered messages based on the user accounts (Vaudreuil, col. 21 L40-67 to col. 22 L1-410), and would have also provided a storage space for storing inbound and outbound messages or to hold incoming and outgoing messages (Vaudreuil, col. 9 L59-61, col. 10 L59-63).

Additional References

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Appelman et al., U. S. Patent No. 6,539,421 B1.
- b. Kikinis U. S. Patent No. 5,727,159.
- c. Perelman et al., U. S. Patent No. 5,563,881.
- d. Clary et al., U. S. Patent No. 6,826,551 B1.
- e. Amin U. S. Patent No. 6,014,559.
- f. Flanagan et al., U. S. Patent No. 6,272,545 B1.
- g. Stuart U. S. Patent No. 5,666,648.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAMAL B. DIVECHA whose telephone number is 571-272-5863. The examiner can normally be reached on 9.00am-5.30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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